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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,416	12/31/2003	Kendall S. Wills	TI-37082 (032350.B577)	9565
23494	7590	01/30/2007	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			BUI, BRYAN	
			ART UNIT	PAPER NUMBER
			2863	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/749,416	WILLS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bryan Bui	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 December 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

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1. Applicant's paper filed on 12/11/2006 has been received and entered. Claims 1-21 are pending in the application.
2. Applicant's remark for request reconsideration has been fully considered, and it is not persuasive.
3. After consulted with 101 panel and specialist, this application is directed to a judicial exception pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106). Further in the remark from page 3, fourth paragraph, relates to "accessing a library of one...characteristics" to page 4, second paragraph, relates to "comparing the wavelet...particular reference wavelet analysis results", the argument is not persuasive. Applicant's modification, from Exhibit A to Wills Declaration, pages 56 and 64 into the limitations of the claimed invention "accessing a library...characteristics" and "comparing the wavelet...particularly reference wavelet analysis results", is not anticipated, and the Exhibit A to Wills Declaration as mentioned in pages 56 and 64 is not enough information to support for the what applicant claimed in the present application, the facts showing is not commensurate in the scope of the limitations of the claim (see MPEP 716).

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6-14, 18-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claims must have either physical transformation and/or a useful, concrete and tangible result. The claims fail to include transformation from one physical state to another. Although, the claims appear useful and concrete, there does not appear to be tangible result claimed. Final step merely recite “responsive to the wavelet..., indicating that anomaly in the wire...reference wavelet analysis results” would not appear to be sufficient to constitute a tangible result, since the outcome of this step has not been used in a disclosed application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. As such, the subject matter of the claim is not patent eligible.

It is noted that it does not matter how many tangible intermediate manipulations are undertaken in the method, but rather whether the final result of the method is concrete, useful and tangible. In this application, the final step of the claims invention does not provide the tangible result to convey to a useful manner/to show to a user. For example of some functional languages used to be applied in the final step of the claim: outputting/displaying the status, storing to do something, adjusting for providing useful manner, **indicating alarm/issuing alarm/alerting/reporting output information corresponding to the condition of the system/device**, calibrating for outputting data apply for controlling device/unit/ in a useful manner, etc.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 6-9, 11-13, and 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bechhoefer et al (US 20040230383). Hereinafter Bechhoefer.

With respect to claim 1, 6, 11, 15, 16, and 15-21, Bechhoefer teaches a system for wavelet analysis of one or more time domain reflectometry (TDR) signals to determine one or more characteristics of one or more anomalies in a wire (paragraph 0081), the system comprising: a library of one or more reference wavelet analysis results that each correspond to one or more known anomalies having one or more known characteristics (figure, item 112; paragraphs 0013, 0086); and an analysis module (figure 2, item 108 operable to: receive a TDR signal that has reflected back up a wire from an anomaly in the wire and calculate a wavelet analysis result from a wavelet analysis of the TDR signal (paragraph 0081); access the library and compare the wavelet analysis result with one or more reference wavelet analysis results (figure 2, paragraphs 0013, figure 22B); if the wavelet analysis result corresponds to one or more particular reference wavelet analysis results, indicate that the anomaly in the wire has one or more particular

known characteristics of one or more particular known anomalies corresponding to the one or more particular reference wavelet analysis results (paragraph 0089) ; and if the wavelet analysis result of the TDR signal does not correspond to one or more reference wavelet analysis results, indicate that the anomaly in the wire lacks one or more known characteristics of one or more known anomalies corresponding to one or more reference wavelet analysis results in the library (paragraph 0091).

With respect to claims 2-4, 7-9, 12-13, wherein the wavelet analysis result comprises a wavelet power spectrum of the TDR signal and the reference wavelet analysis results each comprise one or more reference wavelet power spectra (paragraphs 0081, 0342, figure 28); wherein a wavelet transform is used to calculate the wavelet power spectrum of the TDR signal ( paragraphs 0023, 0342); wherein a location of the anomaly is determined according to the TDR signal (0081, 0094);

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 5, 10, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bechhoefer et al (US 20040230383). Hereinafter Bechhoefer.

Bechhoefer does not disclose an integrated circuit package comprises the wire. However, Bechhoefer teach a technique to determine the defects/events of the wire under test includes a pin connection couples to one or more pins of a wire that may be part of a wireharness (paragraph 0077). It would have been obvious to one of ordinary skill in the art to realize that to test a wire that is included in an integrated circuit package with respect to claimed apparatus is intended to be used does not differentiates the claimed apparatus from the conventional apparatus to satisfying the claimed limitations. Ex parte Masham, 2 USPQ2d-1647 (1987).

***Response to Amendment***

9. The Declaration filed on 9/6/2005 under 37 CFR 1.131 has been considered but is ineffective to overcome the Bechhoefer reference.

Please see the response in section 3 as set forth in this office action above.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is 571-272-2271. The examiner can normally be reached on M-Th from 7am-4pm, and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BB

1/24/2007

BRYAN BUI  
PRIMARY EXAMINER

